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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/583,213	06/16/2006	· Heinrich Gotzig	17275/002001	.7723
22511 OSHA LIANG	7590 06/08/2007		.EXAM	INER
1221 MCKINN			KUNDU, SUJOY K	
SUITE 2800 HOUSTON, TX 77010			ART UNIT	PAPER NUMBER
110031011, 1	A 11010		2863	
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			06/08/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
	10/583,213	GOTZIG ET AL.				
Office Action Summary	Examiner	Art Unit				
	Sujoy K. Kundu	2863				
The MAILING DATE of this communication app Period for Reply	The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONEI	I.  lely filed  the mailing date of this communication.  D (35 U.S.C. § 133).				
Status						
Responsive to communication(s) filed on  2a) ☐ This action is FINAL. 2b) ☒ This  3) ☐ Since this application is in condition for allowar closed in accordance with the practice under E	action is non-final. nce except for formal matters, pro					
Disposition of Claims	•					
4)  Claim(s) 1-15 is/are pending in the application. 4a) Of the above claim(s) is/are withdray 5)  Claim(s) is/are allowed. 6)  Claim(s) 1-15 is/are rejected. 7)  Claim(s) is/are objected to. 8)  Claim(s) are subject to restriction and/or	vn from consideration.					
Application Papers						
9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) access applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Examine	epted or b) objected to by the Eddrawing(s) be held in abeyance. See ion is required if the drawing(s) is obj	e 37 CFR 1.85(a). ected to. See 37 CFR 1.121(d).				
Priority under 35 U.S.C. § 119						
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date August 4, 2006.	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	ate				

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#### **DETAILED ACTION**

## **Priority**

MPEP 706.02(b) section (e)

Perfecting a claim to priority under 35 U.S.C. 119(a)-(d) within the time period set in 37 CFR 1.55(a)(1) or filing a grantable petition under 37 CFR 1.55(c). See MPEP § 201.13. The foreign priority filing date must antedate the reference and be perfected. The filing date of the priority document is not perfected unless applicant has filed a certified priority document in the application (and an English language translation, if the document is not in English) (see 37 CFR 1.55(a)(3)) and the examiner has established that the priority document satisfies the enablement and description requirements of 35 U.S.C. 112, first paragraph.

## Specification

The abstract of the disclosure does not commence on a separate sheet in accordance with 37 CFR 1.52(b)(4). A new abstract of the disclosure is required and must be presented on a separate sheet, apart from any other text.

#### Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-8 and 12-13 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The claims are directed to a judicial exception; as such, pursuant to the Interim Guidelines on Patent Eligible Subject Matter (MPEP 2106)), the claims must have either

physical transformation and/or a useful, concrete and tangible result. The claims fail to include transformation from one physical state to another. Although, the claims appear useful and concrete, there does not appear to be a tangible result claimed. Merely determination of the position of at least one reflection point on the surface of an obstruction would not appear to be sufficient to constitute a tangible result, since the outcome of the determination of the position of at least one reflection point on the surface of an obstruction step has not been used in a disclosed practical application nor made available in such a manner that its usefulness in a disclosed practical application can be realized. As such, the subject matter of the claims is not patent eligible.

Claims 9-10, 14 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The claims are drawn to a computer program per se. A computer program per se are abstract instructions. Therefore, a computer program is not a physical thing (product) nor a process as they are not "acts" being performed. As such, these claims are not directed to one of the statutory categories of invention (See MPEP 2106.01), but are directed to nonstatutory functional descriptive material.

It is noted that computer programs embodied on a computer readable medium or other structure, which would permit the functionality of the program to be realized, would be directed to a product and be within a statutory category of invention, so long as the computer readable medium is not disclosed as non-statutory subject matter per se (signals or carrier waves).

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# Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 6-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Hassler et al. (6,289,282).

With regards to Claim 1 and 11 Hassler teaches a method for determination of the position (x, y) of at least one reflection point  $(R_{1-2})$  on the surface of an obstruction, comprising the following steps:

calculation of a first distance ( $r_1$ ) between the reflection point and a first position ( $x_1$ ) of a distance measurement apparatus from a time period between transmission of a first transmitted signal from the distance measurement apparatus at the position ( $x_1$ ) to the obstruction and reception of a received signal as part of the transmitted signal reflected on the obstruction (Abstract, Figures 2-3, Column 3, Lines 19-50, Column 6, Claim 8);

characterized by calculation of a second distance  $(r_2)$  of the reflection point with respect to a second position  $(x_2)$  of the distance measurement apparatus analogously to the calculation of the first distance  $(r_1)$ ; and calculation of the position (x, y) of the reflection point  $(R_{1-2})$  with the aid of the triangulation method from a first value pair  $(x_1, r_1)$ , comprising the first position  $(x_1)$  of the distance measurement apparatus and the first distance  $(r_1)$  and a second value pair  $(x_2, r_2)$ , comprising the second position  $(x_2)$  of the

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distance measurement apparatus and the second distance (r<sub>2</sub>) (Abstract, Figures 2-3, Column 3, Lines 19-50, Column 6, Claim 8).

With regards to Claim 6 and 13, Hassler teaches the method characterized in the first and the second pairs (x1, r1) (r1, r2) are selected in pairs from a large number of value pairs (xi, ri where I = 1...I) (Column 4, Lines 31-47).

With regards to Claim 7, Hassler teaches the method characterized in that the selection of value pairs from the large number of value pairs and the calculation, based on this, of in each case one position (x,y) of a reflection point (R1-2) is repeated for a large number of differently positioned reflection points on the obstruction (Column 4, Lines 31-47).

With regards to Claim 8, Hassler teaches the method characterized in that the selection of the value pairs from the large number is carried out as required (Column 4, Lines 31-47).

With regards to Claim 9, Hassler teaches a computer program with a program code for a distance measurement apparatus characterized in that the computer program is designed to carry out the method (Column 4, Lines 31-47).

With regards to Claim 10, Hassler teaches a data storage medium characterized by the computer program (Column 4, Lines 31-47).

With regards to Claims 12, 14-15, Hassler teaches the method wherein the distance measurement apparatus is an ultrasound distance measurement apparatus (Column 1, Lines 13-20)

## Allowable Subject Matter

Claim 2-5 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sujoy K. Kundu whose telephone number is 571-272-8586. The examiner can normally be reached on M-F 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached on 571-272-2269. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Sujoy Kundu/

John Barlow
Supervisory Patent Framiner
Technology Center 2800